

I claim:

1. A computerized method determining an allocation of software and data components in a distributed system, the method comprising:

modeling a target system, the system having a plurality of computing resources;

5 determining a set of couplings in the target system;

prepartitioning the set of couplings;

preallocating each coupling in the set of couplings to one of the plurality of computing resources;

interleaving the preallocated data and code partitioning;

10 defining a set of components according to the interleaved and preallocated couplings, the components having a data and a code segment; and

determining a modularity of the set of components.

2. The computerized method of claim 1, further comprising:

15 determining a computer hardware resource based on the determination of the modularity; and

interleaving the data and the code segment of each of the components.

3. The computerized method of claim 1, further comprising:

20 assigning each component of the set of components to a computer hardware resource based on the determination of the modularity; and

interleaving the data and the code segment of each of the components.